



RCRA RECORDS CENTER
FACILITY Proctor & Whitney - Main St
I.D. NO. CTD990672081
FILE LOC. R-1B
OTHER RDMS # 2833

EPA **SOLID WASTE**

PROTOCOL FOR EVALUATING INTERIM STATUS CLOSURE / POST-CLOSURE PLANS

U.S. Environmental Protection Agency

**August
1986**

Solvents
Section B, III E, FG

F001
F002
F003
F004
F005

Could also be received as off-spec material and would carry EPA # U XXX

F007, and
F008, and
F009

also listed as

Sodium Cyanide P106
Potassium Cyanide P098
Copper Cyanide P029
Nickel Cyanide P074

Check
if
correct

* Listed - Marks were Burned

INTERIM STATUS (40 CFR PART 265) CLOSURE/POST-CLOSURE PLANS

	Provided (Y/N) or NA	Location	Comments
I. GENERAL CLOSURE REQUIREMENTS			
+A. Partial and/or Final Closure			
A-1. Closure performance standards [§265.111]	NC	page 1 Intro.	#2 should follow wording in 40 CFR more closely
A-2. Contents of plan [§265.112(b)]	-		
+A-2a. Maximum inventory of wastes [§265.112(b)(3)]	NA		should identify transporter + landfill.
A-2b. Removal/decontamination procedures [§265.112(b)(4)]	NC		cleaning equipment? Extent of decontamination necessary (outside of ductwork)
A-2c. Other activities during closure period [§265.112(b)(5)]	NA		- ash should be wetted.
+A-2d. Closure schedule for each unit/final closure [§265.112(b)(6) and (7)]	NC	page 7	Time shall be 10 days, exacted year of closure is required (is closure plan approved?)
+A-3. Amendment of closure plan [§265.112(c)]	NA		
A-4. Notification of partial and final closure [§265.112(d)]	Y.		
7. A-5. Closure activities performed prior to closure plan approval [§265.112(e)]			
+B. Time Allowed for Closure [§265.113]	N	p 7	shall state that closure to be complete w/in 180 days after approval
B-1. Extension of closure timeframes [§265.113(a) and (b)]	NA		
B-2. Timeframes for demonstrations for extensions [§265.113(c)]	NA		
C. Disposal or Decontamination of Equipment, Structures and Soils [§265.114]	No		Needs to be addressed: tools, clothing, etc.
+D. Certification of Closure	NO	12	include registered mail + 60 day period.
+E. Survey Plat and Certification by Professional Land Surveyor [§265.116]	NA		NA - correct?
F. Notices [§265.119]			
F-1. Record of wastes [§265.119(a)]	NA		
F-2. Notice in deed [§265.119(b)]	NA		

Facility Name _____
ID No. _____

INTERIM STATUS (40 CFR PART 265) CLOSURE/POST-CLOSURE PLANS

	Provided (Y/N) or NA	Location	Comments
F-3. Certification of notice [§265.119(b)(2)]	<u>NA</u>	_____	_____
+G. Closure Cost Estimate [§265.142]	<u>?</u>	_____	<u>in current dollars, 3rd party</u>
G-1. Adjustments to closure cost estimates [§265.142(b)]	<u>NA</u>	_____	<u>NA - current ?</u>
G-2. Revisions to closure cost estimates [§265.142(c)]	<u>NA</u>	_____	_____
H. Financial Assurance for Closure [§265.143]	<u>?</u>	_____	<u>Necessary ?</u>
I. Liability Coverage [§265.147]	<u>?</u>	_____	<u>Necessary ?</u>

Facility Name _____
ID No. _____

INTERIM STATUS (40 CFR PART 265) CLOSURE/POST-CLOSURE PLANS

	Provided (Y/N) or NA	Location	Comments
II. <u>GENERAL POST-CLOSURE REQUIREMENTS</u>			
A. Post-closure Care and Use of Property [§265.117]	NA	- Correct ?	
+A-1. Length of post-closure period specified [§265.117(a)(1)]	_____	_____	_____
+A-2. Increasing/decreasing length of post-closure period [§§265.117(a)(2), 265.118(g)]	_____	_____	_____
A-3. Security requirements [§265.117(b)]	_____	_____	_____
A-4. Property use restrictions [§265.117(c)]	_____	_____	_____
B. Submittal of Post-closure Plan [§265.118(a)]	_____	_____	_____
C. Availability of Post-closure Plan	_____	_____	_____
D. Content of Post-closure Plan [§§265.117(a)(1), 265.118(c)]	_____	_____	_____
D-1. Monitoring activities described [§265.118(c)(1)]	_____	_____	_____
D-2. Maintenance activities described [§265.118(c)(2)]	_____	_____	_____
D-3. Post-closure contact identified [§265.118(c)(3)]	_____	_____	_____
+E. Amendment of Post-closure Plan [§265.118(d) and (g)]	_____	_____	_____
+F. Post-closure Notices [§265.119]			
F-1. Notice to local zoning authority/record of wastes [§265.119(a)]	_____	_____	_____
F-2. Notice in deed [§265.119(b)(1)]	_____	_____	_____
F-3. Certification of notice [§265.119(b)(2)]	_____	_____	_____
F-4. Removal of wastes from a closed landfill [§265.119(c)]	_____	_____	_____
+G. Certifications of Completion of Post-closure Care [§265.120]	_____	_____	_____

Facility Name _____
ID No. _____

INTERIM STATUS (40 CFR PART 265) CLOSURE/POST-CLOSURE PLANS

	Provided (Y/N) or NA	Location	Comments
+H. Post-closure Care Cost Estimate [§265.144]	_____	_____	_____
H-1. Adjustments to post-closure care cost estimates [§265.144(b)]	_____	_____	_____
+H-2. Revisions to post-closure care cost estimates [§265.144(c)]	_____	_____	_____ (
I. Financial Assurance for Post-closure Care [§265.145]	_____	_____	_____

Facility Name _____
ID No. _____

INTERIM STATUS (40 CFR PART 265) CLOSURE/POST-CLOSURE PLANS

	Provided (Y/N) or NA	Location	Comments
IX. CLOSURE OF INCINERATORS			
A. Contents of Plan (§265.112(b))			
A-1. Description of how each unit will be closed [§265.112(b)(1)]	Y		
A-2. Description of how final closure will be conducted [§265.112(b)(2)]	NA		
A-3. Identification of the maximum extent of operation [§265.112(b)(2)]	NA		
A-4. Estimate of the maximum inventory of hazardous wastes [§265.112(b)(3)]	Y		
A-5. Detailed description of removal of waste inventory [§§265.112(b)(3), 265.351]	Y		← includes transport + landfill description of dismantling + removing enough?
+A-6. Detailed description of removal of waste residues [§§265.112(b)(4), 265.114, 265.351]	? only ash		check w/ Steve Year
A-7. Detailed description of other necessary activities [§265.112(b)(5)]	? concrete pad + steel drums		we'lling ash. TALK about handling?
A-8. Schedule for closure of each unit [§265.112(b)(6)]	See	Part 3-1, A-2d	
A-9. Estimate of expected year of final closure [§265.112(b)(7)]	NO		Needs to be included
B. Decontamination Procedures [§§265.112(b)(4), 265.114]			
+B-1. Procedures for cleaning equipment and removing contaminated soils [§§265.112(b)(4), 265.351]	NO		equipment + safety drums + concrete pad
B-2. Management of generated wastes [§§265.114, 265.351]	NO	How will steam	+ steel be collected? ptye 7.
+B-3. Methods for sampling and testing to demonstrate success of decontamination [§§265.112(b)(4), 265.351]	?		decontam, concrete pad.
B-4. Criteria for determining the extent of decontamination necessary [§265.112(b)(4)]	N		How will this be determined?

I. GENERAL CLOSURE REQUIREMENTS
A. Partial and/or Final Closure

<u>REGULATORY REQUIREMENT</u>	<u>EVALUATION CRITERIA</u>	<u>REFERENCES</u>	<u>FINDINGS/COMMENTS</u>
Identification of the steps necessary to perform partial closure (i.e., closure of a single hazardous waste management unit) and/or final closure of the facility (i.e., closure of the entire facility) (§265.112(b)(1) and (2))	<p>✓For final closure, the plan must identify the steps required to close the facility at its maximum extent of operation.</p> <p>✓For partial closure, the plan must identify the steps necessary to close a single hazardous waste management unit.</p> <p>The steps required to close must be broken down in sufficient detail such that:</p> <ol style="list-style-type: none">1) The closure process is understandable;2) A closure schedule can be developed; and3) Quantities and unit prices can be developed for closure cost estimation. <p>✓The specific steps required to close a unit or facility should be evaluated in Sections III through XI of this checklist.</p>		<p>- "As is" is sufficient</p> <p>- plan addresses this</p> <p>Need clarification</p>

1. GENERAL CLOSURE REQUIREMENTS
A-2. Contents of Plan
A-2a. Maximum Inventory of Wastes

REGULATORY REQUIREMENT

An estimate of the maximum inventory of hazardous wastes ever on-site over the active life of the facility and a detailed description of the methods to be used during partial and final closure, including, but not limited to, methods for removing, transporting, treating, storing, or disposing of all hazardous waste, identification of and the type(s) of off-site hazardous waste management unit(s) to be used, if applicable (§265.112(b)(3)).

EVALUATION CRITERIA

The maximum inventory generally can be assumed to be the capacity of the unit. Attempts to identify maximum inventory as less than full capacity must be examined carefully for validity. Calculations showing the derivation of maximum inventory must be provided by the applicant and should address all forms of inventory (i.e., wastes in storage, wastes in drainage pipes, etc.).

- ✓ The description of how the hazardous waste will be managed at closure should be evaluated in Sections III through XI of this checklist.

REFERENCES

Section 7

FINDINGS/COMMENTS

- Ash handling needs further clarification
- Need to identify transporter and landfill.

1. GENERAL CLOSURE REQUIREMENTS

A-2. Contents of Plan
A-2d. Closure Schedule

REGULATORY REQUIREMENT

A schedule for closure of each hazardous waste management unit and for final closure of the facility (§265.112(b)(6)).

Estimate of expected year of final closure (§265.112(b)(7)).

EVALUATION CRITERIA

Closure schedule must indicate the total time required for closure, and be broken down sufficiently to allow tracking of the progress of closure. In general, the breakdown should correspond to the steps required to close as described in the closure plan.

The closure plan must include an estimate of the expected year of final closure for: (1) facilities that use trust funds to demonstrate financial assurance under §§265.143 or 265.145 and whose remaining operating life is less than twenty years, and (2) facilities without approved closure plans.

REFERENCES

Section 6
page 7

"

FINDINGS/COMMENTS

- time should be in days.

- expected year should be included.

1. GENERAL CLOSURE REQUIREMENTS
A-3. Amendment of Closure Plan

REGULATORY REQUIREMENT

Amendment of the closure plan (§265.112(c)).

EVALUATION CRITERIA

The owner/operator must amend the closure plan whenever: ① changes in operating plans or facility design affect the closure plan; 2) there is a change in the expected year of closure, if applicable; or, 3) in conducting partial or final closure activities, unexpected events require a modification of the closure plan. The owner/operator must amend the closure plan at least ⑥0 days prior to the proposed change in facility design or operation, or no later than 60 days after an unexpected event. If an unexpected event occurs during the partial or final closure period, the owner or operator must amend the closure plan no later than 30 days after the unexpected event. These provisions also apply to owners/operators of surface impoundments and waste piles who intended to remove wastes at closure, but are required to close as landfills per §265.310.

REFERENCES

Section 6
page 7
#6

↑
when does P+W
get 120 days from?

FINDINGS/COMMENTS

-does the facility have
to amend its Part B
60 days before closure
activities begin?

I. GENERAL CLOSURE REQUIREMENTS
B. Time Allowed for Closure

REGULATORY REQUIREMENT

Time allowed for closure activities (§265.113).

EVALUATION CRITERIA

Unless an exemption is granted, the waste inventory must be treated, removed from the site, or disposed on-site within 90 days after receiving final volume of waste, or within 90 days after approval of the closure plan, whichever is later. Closure must be completed within 180 days after receipt of the final volume of waste, or within 180 days after approval of the closure plan, whichever is later.

Any request for extension of closure time must be substantiated by the demonstrations required by §§265.113(a)(1) (for the 90 day period) and 265.113(b)(1) (for the 180 day period).

REFERENCES

*page 7
After Table #1*

FINDINGS/COMMENTS

*- Closure must be complete
within 180 days after
Approval of closure
plan*

1. GENERAL CLOSURE REQUIREMENTS
D. Certification of Closure

REGULATORY REQUIREMENT

Certification that the hazardous waste management unit or facility has been closed in accordance with the specifications in the approved closure plan (§265.115).

EVALUATION CRITERIA

The plan must specify that within 60 days of completion of closure of each surface impoundment, waste pile, land treatment, or landfill unit, and within 60 days of completion of final closure (of the entire facility), the owner/operator will submit certification that the unit or facility, as applicable, has been closed in accordance with the approved closure plan.

The certification must be sent by registered mail and must be signed by the owner/operator and an independent registered professional engineer. In the case of land treatment units, a certification may be signed by an independent qualified soil scientist in lieu of the engineer.

✓ The plan must specify that documentation supporting the engineer's certification will be furnished upon request until the owner/operator has been released from the financial assurance requirements under §265.143(h).

REFERENCES

page 7
#5

page 12
part 11.0

page 12
part 11.0

FINDINGS/COMMENTS

- must state that it will be done within 60 days after completion of closure. No time frame stated in plan.

- must include that stat will be sent by registered mail.

- included!

I. GENERAL CLOSURE REQUIREMENTS
E. Survey Plat

<u>REGULATORY REQUIREMENT</u>	<u>EVALUATION CRITERIA</u>	<u>REFERENCES</u>	<u>FINDINGS/COMMENTS</u>
Submission of survey plat (§265.116).	<p>The closure plan must state that the survey plat will be submitted, no later than the submission of the closure certification of each hazardous waste disposal unit, to the local zoning authority or the authority with jurisdiction over local land use, and to the Regional Administrator.</p> <p>The survey plat must indicate the location and dimensions of landfill cells or other hazardous waste disposal units with respect to permanently surveyed benchmarks.</p> <p>The plat must be prepared and certified by a professional land surveyor.</p> <p>The plat filed with the local zoning authority or authority with jurisdiction over local land use must contain a note, prominently displayed, stating the obligation to restrict disturbance of the hazardous waste disposal unit.</p>	NA	

Effective
October 29, 1986

1. GENERAL CLOSURE REQUIREMENTS
G. Closure Cost Estimate

REGULATORY REQUIREMENT

As per §265.142(a), the closure plan must contain a detailed estimate, in current dollars, of the cost of closing the facility in accordance with the requirements of §§265.111-265.115 and applicable closure requirements of §§265.178, 265.197, 265.228, 265.258, 265.280, 265.310, 265.351, 265.381, and 265.404.

EVALUATION CRITERIA

✓ The estimated closure cost must correspond to the point in the facility's operating life when closure would be most costly. This generally corresponds to the maximum extent of the operation and maximum waste inventory.

The closure cost estimate must be based on the costs to the owner/operator of hiring a third party to close the facility. A third party is a party who is neither a parent nor a subsidiary of the owner or operator.

The cost estimate should be based upon quantities and unit costs for materials and labor (including supervision) as provided by a third party. Closure costs are best understood when they are broken down to parallel the steps required to close given in the description of closure.

✓ The owner/operator may use costs for on-site disposal if he can demonstrate that on-site disposal capacity will exist at all times over the life of the facility.

✓ The closure cost estimate may not incorporate any salvage value realized from the sale of hazardous wastes, facility structures or equipment, land, or other facility assets at the time of closure.

✓ The cost estimate may not assume a zero cost for handling of hazardous wastes with potential economic value.

REFERENCES

page 8
part 7.0

pages 9+10

pages 9+10

NA

pages 9+10

pages 9+10

FINDINGS/COMMENTS

- addressed sufficiently

- needs work!

- more description needed!

- NO salvage value included

- NO zero cost assumed.

IX. CLOSURE OF INCINERATORS
A-6. Removal of Waste Residues
B-1. Procedures for Cleaning Equipment

REGULATORY REQUIREMENT

closure, the owner/ operator must remove all hazardous waste and hazardous waste residues including but not limited to ash, scrubber waters, and scrubber sludges) from the incinerator (§265.351).

contaminated equipment, structures, and facilities must be properly disposed or decontaminated (§265.114).

EVALUATION CRITERIA

The closure plan must address the removal of all waste and residues, including:

- o ash
- ✓ scrubber waters
- ✓ scrubber sludges

The procedures for decontaminating all equipment - including the incinerator, ash collection equipment, and emissions control equipment - must be provided. Alternatively, all or some of the equipment may be disassembled and disposed at a permitted landfill.

For equipment or structures that will be disposed, the following must be provided:

- ✓ list of equipment,
- ✓ method of transporting wastes,
 - o identification and types of off-site hazardous waste management unit(s), and
- ✓ criteria to be used during closure to determine if any equipment originally listed for decontamination will be disposed of instead.

For equipment or structures that are to be decontaminated, the following must be provided:

- o method of decontamination;
- o procedures to protect the environment during decontamination (for example, how would wash water be collected;
- o method of removing wash waters and transporting them to off-site waste management unit(s); and
- o identification and description of the off-site waste management unit(s).

REFERENCES

page 8

page 8

page 8

page 7 #3

page 7 #3

FINDINGS/COMMENTS

- clarify ash handling

- No scrubber waters
- No scrubber sludges

- all equipment is listed
- included
- Need to identify where material will be sent.

NA - all equipment will be disposed of.

Effective
January 23, 1981

- Concrete pad
- Shovels
- Suits/gloves.

more clarification
needed! For at
least

IX. CLOSURE OF INCINERATORS
B-3. Sampling and Testing to Demonstrate Success of Decontamination

REGULATORY REQUIREMENT

EVALUATION CRITERIA

REFERENCES

FINDINGS/COMMENTS

Description of the methods for sampling and testing for determining extent of decontamination and/or the success of decontamination efforts
65.112(b)(4)).

The plan must provide criteria to be used to judge the success of the decontamination efforts. This generally will be on the basis of detection of, or specific concentrations for, appropriate hazardous wastes or constituents. Specific, quantitative criteria should be specified in the plan.

The plan then must specify a testing program to determine if the standard of decontamination has been met. The testing program must include a description of sampling procedures, test parameters, and analytical methods.

The method of sampling may vary from a wipe test to rinsing with water or solvent. A sufficient number of samples must be taken to adequately sample the incinerator, appurtenances, and confinement area (including soils). For a soil confinement area, a sufficient number of samples should be taken at random locations.

Testing parameters selected as criteria for decontamination must be indicative of the wastes burned in the incinerator. The specified parameters should include the hazardous waste(s) stored in the tank, or its hazardous constituents.

Analytical methods must be identified for each parameter. Only methods from SW-846 or methods approved under §260.21 are acceptable. If an alternative method has been approved, the record should contain analytical data or other justification showing that the approved method is equivalent to that specified in SW-846.

page 5
part 6.0

page 12
Table #3

- Need to address decon procedure for any remaining portion of the incinerator train

- Needs work.

- Needs work

- Should include ONE test procedure, not more than one. (for liquid rinses)
- Should include analytical methods for wipe tests.